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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,090	02/20/2004	Henry W. Bonk	402200003DVC	6886

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EXAMINER	
AUGHENBAUGH, WALTER	
ART UNIT	**PAPER NUMBER**
1794	
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09/28/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/784,090	BONK ET AL.	
	Examiner	Art Unit	
	WALTER B. AUGHENBAUGH	1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 June 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7,9 and 10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7,9 and 10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Acknowledgement of Applicant's Amendments

1. The amendments made in claim 1 in the Amendment filed June 16, 2009 have been received and considered by Examiner.

WITHDRAWN REJECTIONS

2. The obviousness double patenting rejection over USPN 5,952,065 in view of Lee et al. (USPN 5,605,961) made of record in the previous Office Action mailed March 31, 2009 has been withdrawn due to Applicant's amendment in claim 1 in the Amendment filed June 16, 2009.

3. The 35 U.S.C. 103 rejection of claims 1-10 over USPN 5,952,065 in view of Lee et al. (USPN 5,605,961) made of record in the previous Office Action mailed March 31, 2009 has been withdrawn due to Applicant's amendment in claim 1 in the Amendment filed June 16, 2009.

NEW REJECTIONS

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting

ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-7, 9 and 10 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 47 of U.S. Patent No. 6,013,340 in view of Lee et al. (USPN 5,605,961).

Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 47 of U.S. Patent No. 6,013,340 teaches a device that corresponds to the claimed device comprising thermoplastic aliphatic and aromatic polyurethanes. Claim 47 and col. 15, lines 16-25. Col. 15, lines 16-25 shows that the claim terminology "thermoplastic polyurethane" includes polyurethane thermoplastic elastomers.

U.S. Patent No. 6,013,340 fails to explicitly teach an embodiment where the thermoplastic polyurethane is formed as the reaction product of at least one diol as claimed, at least one difunctional extender and at least one aliphatic diisocyanate (although claims 7-12 and 46 teach use of an extender and a diisocyanate).

Lee et al., however discloses a thermoplastic molding composition that comprises a thermoplastic polyurethane (col. 2, lines 30-36), and that the thermoplastic polyurethane is formed via well known methods in which at least one polyester or polyether diol, at least one difunctional extender and at least one diisocyanate are reacted (col. 2, line 41-col. 3, line 3). Lee et al. disclose that isophorone diisocyanate, hexamethylene diisocyanate, methylene bis (cyclohexyl isocyanate) and xylylene diisocyanate, all of which are aliphatic diisocyanates (see,

for example, paragraph 0082 of Applicant's specification), are suitable diisocyanates for forming the thermoplastic polyurethane (col. 4, lines 6-17). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a thermoplastic polyurethane formed from the reaction product of at least one polyester or polyether diol, at least one difunctional extender and at least one aliphatic diisocyanate (such as isophorone diisocyanate, hexamethylene diisocyanate, methylene bis (cyclohexyl isocyanate) and xylylene diisocyanate) since the thermoplastic polyurethane formed from the reaction product of these reactants is a well known composition for formation of a thermoplastic molding composition as taught by Lee et al.

Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed a multilayered article that corresponds to the claimed article because claims 50-52 of U.S. Patent No. 6,013,340 teach it is known to form such a multilayered article.

6. Claims 1-7, 9 and 10 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 10 of U.S. Patent No. 6,203,868 in view of Lee et al. (USPN 5,605,961).

Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 10 of U.S. Patent No. 6,203,868 teaches a device that corresponds to the claimed device comprising thermoplastic aliphatic and aromatic polyurethanes. Claim 10 and col. 10, lines 57-65. Col. 10, lines 57-65 shows that the claim terminology "thermoplastic polyurethane" includes polyurethane thermoplastic elastomers.

U.S. Patent No. 6,203,868 fails to explicitly teach an embodiment where the thermoplastic polyurethane is formed as the reaction product of at least one diol as claimed, at least one difunctional extender and at least one aliphatic diisocyanate.

Lee et al., however discloses a thermoplastic molding composition that comprises a thermoplastic polyurethane (col. 2, lines 30-36), and that the thermoplastic polyurethane is formed via well known methods in which at least one polyester or polyether diol, at least one difunctional extender and at least one diisocyanate are reacted (col. 2, line 41-col. 3, line 3). Lee et al. disclose that isophorone diisocyanate, hexamethylene diisocyanate, methylene bis (cyclohexyl isocyanate) and xylylene diisocyanate, all of which are aliphatic diisocyanates (see, for example, paragraph 0082 of Applicant's specification), are suitable diisocyanates for forming the thermoplastic polyurethane (col. 4, lines 6-17). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a thermoplastic polyurethane formed from the reaction product of at least one polyester or polyether diol, at least one difunctional extender and at least one aliphatic diisocyanate (such as isophorone diisocyanate, hexamethylene diisocyanate, methylene bis (cyclohexyl isocyanate) and xylylene diisocyanate) since the thermoplastic polyurethane formed from the reaction product of these reactants is a well known composition for formation of a thermoplastic molding composition as taught by Lee et al.

Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed a multilayered article that corresponds to the claimed article because claim 11 of U.S. Patent No. 6,203,868 teach it is known to form such a multilayered article.

7. Claims 1-7, 9 and 10 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 9 (and additionally, claim 20) of U.S. Patent No. 6,599,597 in view of Lee et al. (USPN 5,605,961).

Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 9 (and 20) of U.S. Patent No. 6,599,597 teach a device that corresponds to the claimed device comprising thermoplastic aliphatic and aromatic polyurethanes. Claims 9 (and 20) and col. 10, line 66-col. 11, line 7. Col. 10, line 66-col. 11, line 7 shows that the claim terminology "thermoplastic polyurethane" includes polyurethane thermoplastic elastomers.

U.S. Patent No. 6,599,597 fails to explicitly teach an embodiment where the thermoplastic polyurethane is formed as the reaction product of at least one diol as claimed, at least one difunctional extender and at least one aliphatic diisocyanate.

Lee et al., however discloses a thermoplastic molding composition that comprises a thermoplastic polyurethane (col. 2, lines 30-36), and that the thermoplastic polyurethane is formed via well known methods in which at least one polyester or polyether diol, at least one difunctional extender and at least one diisocyanate are reacted (col. 2, line 41-col. 3, line 3). Lee et al. disclose that isophorone diisocyanate, hexamethylene diisocyanate, methylene bis (cyclohexyl isocyanate) and xylylene diisocyanate, all of which are aliphatic diisocyanates (see, for example, paragraph 0082 of Applicant's specification), are suitable diisocyanates for forming the thermoplastic polyurethane (col. 4, lines 6-17). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a thermoplastic polyurethane formed from the reaction product of at least one polyester or polyether diol, at least

one difunctional extender and at least one aliphatic diisocyanate (such as isophorone diisocyanate, hexamethylene diisocyanate, methylene bis (cyclohexyl isocyanate) and xylylene diisocyanate) since the thermoplastic polyurethane formed from the reaction product of these reactants is a well known composition for formation of a thermoplastic molding composition as taught by Lee et al.

8. Claims 1-7, 9 and 10 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 22 of U.S. Patent No. 6,652,940 in view of Lee et al. (USPN 5,605,961).

Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 22 of U.S. Patent No. 6,652,940 teaches a device that corresponds to the claimed device comprising thermoplastic aliphatic and aromatic polyurethanes. Claim 22 and col. 14, lines 59-67. Col. 14, lines 59-67 shows that the claim terminology "thermoplastic polyurethane" includes polyurethane thermoplastic elastomers. The container that is permanently sealed and tht includes a captive gas of claim 26, and the inflatable ball of claim 27, correspond to the claimed cushioning device.

U.S. Patent No. 6,652,940 fails to explicitly teach an embodiment where the thermoplastic polyurethane is formed as the reaction product of at least one diol as claimed, at least one difunctional extender and at least one aliphatic diisocyanate.

Lee et al., however discloses a thermoplastic molding composition that comprises a thermoplastic polyurethane (col. 2, lines 30-36), and that the thermoplastic polyurethane is formed via well known methods in which at least one polyester or polyether diol, at least one

difunctional extender and at least one diisocyanate are reacted (col. 2, line 41-col. 3, line 3). Lee et al. disclose that isophorone diisocyanate, hexamethylene diisocyanate, methylene bis (cyclohexyl isocyanate) and xylylene diisocyanate, all of which are aliphatic diisocyanates (see, for example, paragraph 0082 of Applicant's specification), are suitable diisocyanates for forming the thermoplastic polyurethane (col. 4, lines 6-17). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a thermoplastic polyurethane formed from the reaction product of at least one polyester or polyether diol, at least one difunctional extender and at least one aliphatic diisocyanate (such as isophorone diisocyanate, hexamethylene diisocyanate, methylene bis (cyclohexyl isocyanate) and xylylene diisocyanate) since the thermoplastic polyurethane formed from the reaction product of these reactants is a well known composition for formation of a thermoplastic molding composition as taught by Lee et al.

Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed a multilayered article that corresponds to the claimed article because claim 23 of U.S. Patent No. 6,652,940 teach it is known to form such a multilayered article.

9. Claims 1-7, 9 and 10 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 21 of U.S. Patent No. 6,692,803 in view of Lee et al. (USPN 5,605,961).

Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 21 of U.S. Patent No. 6,692,803 teaches a device that corresponds to

the claimed device comprising thermoplastic aliphatic and aromatic polyurethanes. Claim 21 and col. 14, lines 55-63. Col. 14, lines 55-63 shows that the claim terminology "thermoplastic polyurethane" includes polyurethane thermoplastic elastomers.

U.S. Patent No. 6,692,803 fails to explicitly teach an embodiment where the thermoplastic polyurethane is formed as the reaction product of at least one diol as claimed, at least one difunctional extender and at least one aliphatic diisocyanate.

Lee et al., however discloses a thermoplastic molding composition that comprises a thermoplastic polyurethane (col. 2, lines 30-36), and that the thermoplastic polyurethane is formed via well known methods in which at least one polyester or polyether diol, at least one difunctional extender and at least one diisocyanate are reacted (col. 2, line 41-col. 3, line 3). Lee et al. disclose that isophorone diisocyanate, hexamethylene diisocyanate, methylene bis (cyclohexyl isocyanate) and xylylene diisocyanate, all of which are aliphatic diisocyanates (see, for example, paragraph 0082 of Applicant's specification), are suitable diisocyanates for forming the thermoplastic polyurethane (col. 4, lines 6-17). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a thermoplastic polyurethane formed from the reaction product of at least one polyester or polyether diol, at least one difunctional extender and at least one aliphatic diisocyanate (such as isophorone diisocyanate, hexamethylene diisocyanate, methylene bis (cyclohexyl isocyanate) and xylylene diisocyanate) since the thermoplastic polyurethane formed from the reaction product of these reactants is a well known composition for formation of a thermoplastic molding composition as taught by Lee et al.

Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed a multilayered article that corresponds to the claimed article because claim 22 of U.S. Patent No. 6,692,803 teach it is known to form such a multilayered article.

10. Claims 1-7, 9 and 10 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 7 of U.S. Patent No. 6,730,379 in view of Lee et al. (USPN 5,605,961).

Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 7 of U.S. Patent No. 6,730,379 teach a device that corresponds to the claimed device comprising thermoplastic aliphatic and aromatic polyurethanes. Claim 7 and col. 10, lines 55-67. Col. 10, lines 55-67 shows that the claim terminology "thermoplastic polyurethane" includes polyurethane thermoplastic elastomers.

U.S. Patent No. 6,730,379 fails to explicitly teach an embodiment where the thermoplastic polyurethane is formed as the reaction product of at least one diol as claimed, at least one difunctional extender and at least one aliphatic diisocyanate.

Lee et al., however discloses a thermoplastic molding composition that comprises a thermoplastic polyurethane (col. 2, lines 30-36), and that the thermoplastic polyurethane is formed via well known methods in which at least one polyester or polyether diol, at least one difunctional extender and at least one diisocyanate are reacted (col. 2, line 41-col. 3, line 3). Lee et al. disclose that isophorone diisocyanate, hexamethylene diisocyanate, methylene bis (cyclohexyl isocyanate) and xylylene diisocyanate, all of which are aliphatic diisocyanates (see,

for example, paragraph 0082 of Applicant's specification), are suitable diisocyanates for forming the thermoplastic polyurethane (col. 4, lines 6-17). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a thermoplastic polyurethane formed from the reaction product of at least one polyester or polyether diol, at least one difunctional extender and at least one aliphatic diisocyanate (such as isophorone diisocyanate, hexamethylene diisocyanate, methylene bis (cyclohexyl isocyanate) and xylylene diisocyanate) since the thermoplastic polyurethane formed from the reaction product of these reactants is a well known composition for formation of a thermoplastic molding composition as taught by Lee et al.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter B. Aughenbaugh whose telephone number is (571) 272-1488. The examiner can normally be reached on Monday-Thursday from 9:00am to 7:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye, can be reached on (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Walter B Aughenbaugh /

Examiner, Art Unit 1794

9/24/09